

STATEMENT UNDER 37 CFR 3.73(b)Applicant/Patent Owner: Aptina Imaging CorporationApplication No./Patent No.: 6,859,227 & 11/045,155 Filed/Issue Date: 04/18/2000 & 01/31/05Entitled: ACTIVE PIXEL SENSOR WITH REDUCED FIXED PATTERN NOISE

Aptina Imaging Corporation, a Corporation
 (Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or
2. ☐ an assignee of less than the entire right, title and interest.
 (The extent (by percentage) of its ownership interest is _____ %)

in the patent application/patent identified above by virtue of either:

- A. ☐ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

OR

- B. ☒ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as follows:

1. From: Andersson, Anders, et al. To: Photobit Corporation
 The document was recorded in the United States Patent and Trademark Office at Reel 011067, Frame 0223, or for which a copy thereof is attached.
2. From: Photobit Corporation To: Micron Technology, Inc.
 The document was recorded in the United States Patent and Trademark Office at Reel 012745, Frame 0385, or for which a copy thereof is attached.
3. From: Micron Technology, Inc. To: Aptina Imaging Corporation
 The document was recorded in the United States Patent and Trademark Office at Reel 021785, Frame 0065, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

- ☒ As required by 37 CFR 3.73(b)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11.

[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, to record the assignment in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

Signature

Date

Thomas J. D'Amico, Reg. No. 28,371

12/23/08
202-420-2232

Printed or Typed Name

Telephone Number

Attorney for Assignee

Title

PATENT ASSIGNMENT AGREEMENT

1. Definitions

(a) "Agreement" shall mean this Patent Assignment Agreement.

(b) "Assignee" shall mean **Aptina Imaging Corporation**, a Cayman Islands corporation with offices at c/o Citco Trustees (Cayman) Limited, Regatta Office Park, West Bay Road, Grand Cayman, Y1-1205, Cayman Islands.

(c) "Assignor" shall mean **Micron Technology, Inc.**, a Delaware corporation with offices at 8000 South Federal Way, Boise, ID 83707.

(d) "Effective Date" shall mean October 3, 2008.

(e)

A large rectangular area of the document is completely redacted with black ink, covering approximately five lines of text.

(f)

A large rectangular area of the document is completely redacted with black ink, covering approximately six lines of text.

(g) "Imaging Patents" shall mean those patents identified in ATTACHMENT "A" hereto, including, without limitation, all divisions, continuations, continuations-in-part, reissues, reexaminations, and all foreign counterparts thereof, and which may issue thereon or in connection therewith after the Effective Date of this Agreement.

(h) "Imaging Patent Applications" shall mean those filed patent applications identified in ATTACHMENT "B" hereto, including, without limitation, all patents, divisions, continuations, continuations-in-part, reissues, reexaminations, and all foreign counterparts which may issue thereon or in connection therewith after the Effective Date of this Agreement.

(i) "Semiconductor Patents" shall mean those patents identified in ATTACHMENT "D" hereto, including, without limitation, all divisions, continuations, continuations-in-part, reissues, reexaminations, and all foreign counterparts thereof, and which may issue thereon or in connection therewith after the Effective Date of this Agreement.

(j) "Semiconductor Patent Applications" shall mean those filed patent applications identified in ATTACHMENT "E" hereto, including, without limitation, all patents, divisions, continuations, continuations-in-part, reissues, reexaminations, and all foreign counterparts which may issue thereon or in connection therewith after the Effective Date of this Agreement.

(k) [REDACTED]

2. [REDACTED]

(a) Subject to the terms and conditions of this Agreement, and subject to the rights of others existing as of the Effective Date of this Agreement if any, Assignor, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, hereby sells, assigns, and transfers to Assignee its entire right, title and interest in and to the Imaging Patents, including all rights to causes of action and remedies related thereto (including the right to sue for past, present or future infringement of rights related to the foregoing and the right to collect damages therefor). Assignor hereby authorizes and requests the Commissioner of Patents of the United States, and any other official of the United States and any country foreign to the United States whose duty it is to issue or record patents, to issue the Imaging Patents to Assignee and to record assignment of the Imaging Patents to Assignee.

(b) Subject to the terms and conditions of this Agreement, and subject to the rights of others existing as of the Effective Date of this Agreement if any, Assignor, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, hereby sells, assigns, and transfers to Assignee its entire right, title and interest in and to the Intellectual Property rights in the Imaging Patent Applications. Assignor hereby authorizes and requests the Commissioner of Patents of the United States, and any other official of the United States and any country foreign to the United States whose duty it is to issue or record patents, to record assignment of the Imaging Patent Applications to Assignee.

(c) [REDACTED]

(d) Subject to the terms and conditions of this Agreement, and subject to the rights of others existing as of the Effective Date of this Agreement if any, and subject further to the restrictions on the Semiconductor Patents set out below, Assignor, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, hereby sells, assigns, and transfers to Assignee its entire right, title and interest in and to the Semiconductor Patents, including all rights to causes of action and remedies related thereto (including the right to sue for past, present or future infringement of rights related to the foregoing and the right to collect damages therefor). Assignor hereby authorizes and requests the Commissioner of Patents of the United States, and any other official of the United States and any country foreign to the United States whose duty it is to issue or record patents, to issue the Semiconductor Patents to Assignee and to record assignment of the Semiconductor Patents to Assignee.

(e) Subject to the terms and conditions of this Agreement, and subject to the rights of others existing as of the Effective Date of this Agreement if any, [REDACTED], Assignor, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, hereby sells, assigns, and transfers to Assignee its entire right, title and interest in and to the Intellectual Property rights in the Semiconductor Patent Applications. Assignor hereby authorizes and requests the Commissioner of Patents of the United States, and any other official of the United States and any country foreign to the United States whose duty it is to issue or record patents, to record assignment of the Semiconductor Patent Applications to Assignee.

(f)

[REDACTED]

[REDACTED]

[REDACTED]

3 [REDACTED]

[REDACTED]

4. [REDACTED]

[REDACTED]

5. [REDACTED]

[REDACTED]

[REDACTED]

6.

[REDACTED]

[REDACTED]

7. **General**

This Agreement shall be effective as of the Effective Date hereof and shall be binding on the respective heirs, assigns, representatives, and successors of Assignor and of Assignee.

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Agreed to by:

Micron Technology, Inc.

Signed: [Signature]

Date: 9/26/08, 2008

Notarization

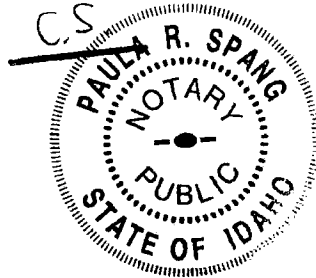
State of Idaho
County of Ada

On 9/26/08, before me, Paula R. Spang, personally appeared the above-named Steven R. Appleton
(date) (notary name)

who executed this Assignment in my presence and acknowledged to me that he did so of his own free will and in his authorized capacity for the purposes set forth herein.

Signed: [Signature]
My commission expires: 8/12/11

REVIEWED
MTI LEGAL



Agreed to by:

Aptina Imaging Corporation

Signed: Thomas L. Lauer Jr.

Date: 9/26/08, 2008

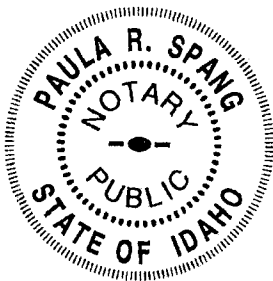
Notarization

State of Idaho
County of Ada

On 9/26/08, before me, Paula R. Spang, personally appeared the above-named Thomas L. Lauer, Jr.
(date) (notary name)

who executed this Assignment in my presence and acknowledged to me that he did so of his own free will and in his authorized capacity for the purposes set forth herein.

Signed: [Signature]
My commission expires: 8/12/11



[Signature page to the Patent Assignment Agreement]

ATTACHMENT "A"

IMAGING PATENTS

Aptina Issued

PATENT NUMBER	FILE NUMBER	TITLE	COUNTRY NAME	ISSUE DATE
6853045	1998-0272.02/US	PIXEL CELL WITH HIGH STORAGE CAPACITANCE FOR A CMOS IMAGER	United States of America	Feb 8, 2005
6858460	1998-0449.04/US	RETROGRADE WELL STRUCTURE FOR A CMOS IMAGER	United States of America	Feb 22, 2005
6858829	AVGO-0031.00/US	AVALANCHE PHOTODIODE ARRAY BIASING DEVICE AND AVALANCHE PHOTODIODE STRUCTURE	United States of America	Feb 22, 2005
→ 6859227	PBIT-0084.00/US	ACTIVE PIXEL SENSOR WITH REDUCED FIXED PATTERN NOISE	United States of America	Feb 22, 2005 ←
6861634	2002-0307.00/US	CMOS ACTIVE PIXEL SENSOR WITH A SAMPLE AND HOLD CIRCUIT HAVING MULTIPLE INJECTION CAPACITORS AND A FULLY DIFFERENTIAL CHARGE MODE LINEAR SYNTHESIZER WITH SKEW CONTROL	United States of America	Mar 1, 2005
6861637	2002-0432.01/US	PROVIDING CURRENT TO COMPENSATE FOR SPURIOUS CURRENT WHILE RECEIVING SIGNALS THROUGH A LINE	United States of America	Mar 1, 2005
6870149	PBIT-0072.01/US	Superposed Multi-Junction Color APS	United States of America	Mar 22, 2005
6870496	PBIT-0088.02/US	LOW VOLTAGE ANALOG-TO-DIGITAL CONVERTERS WITH INTERNAL REFERENCE VOLTAGE AND OFFSET	United States of America	Mar 22, 2005
6870565	PBIT-0060.00/US	SEMICONDUCTOR IMAGING SENSOR ARRAY DEVICES WITH DULA-PROT DIGITAL READOUT	United States of America	Mar 22, 2005
6872640	2003-0168.00/US	SOI CMOS DEVICE WITH REDUCED DIBL	United States of America	Mar 29, 2005
6873363	PBIT-0068.00/US	TECHNIQUE FOR FLAGGING OVERSATURATED PIXELS	United States of America	Mar 29, 2005
6873364	PBIT-0056.00/US	LOW-POWER SIGNAL CHAIN FOR IMAGE SENSORS	United States of America	Mar 29, 2005
6878568	2002-0057.01/US	CMOS IMAGER AND METHOD OF FORMATION	United States of America	Apr 12, 2005
6881942	PBIT-0159.00/US	READOUT OF ARRAY-BASED ANALOG DATA IN SEMICONDUCTOR-BASED DEVICES	United States of America	Apr 19, 2005

ATTACHMENT "B"

IMAGING PATENT APPLICATIONS

Aptina Applications

FILE NUMBER	TITLE	STATUS	COUNTRY NAME	APPLICATION NUMBER	DATE FILED
PBIT-0084.00/PR	ACTIVE PIXEL SENSOR WITH REDUCED FIXED PATTERN NOISE	Abandoned	United States of America	6013412	Jan 31, 2005
PBIT-0084.01/US	ACTIVE PIXEL SENSOR WITH REDUCED FIXED PATTERN NOISE	Pending	United States of America	11046155	Jan 31, 2005
PBIT-0084.05/US	LOW VOLTAGE ANALOG/DIGITAL CONVERTERS WITH INTERMEDIATE REFERENCE VOLTAGE AND OFFSET	Abandoned	United States of America	10800161	Feb 22, 1999
PBIT-0089.00/PR	Techniques to Increase Signal Dynamic Range in CMOS APS	Abandoned	United States of America	60151619	Aug 31, 1999
PBIT-0093.00/PR	Calibration Circuit for Subpixel Readout in APS	Abandoned	United States of America	60173013	Dec 21, 1999
PBIT-0096.00/PR	P-type Reset/Readout Circuitry for Radiation Hard APS	Abandoned	United States of America	60151219	Aug 26, 1999
PBIT-0097.00/PR	Noise Immune to Correlated Pixel Readout	Abandoned	United States of America	60173449	Dec 22, 1999
PBIT-0099.00/PR	Adaptive Compression of High Dynamic Range Images Based on Histogram Equalization	Abandoned	United States of America	60179308	Jan 31, 2000
PBIT-0101.00/PR	Global Readout of Shared and Shared Shutter CMOS Sensor	Abandoned	United States of America	60179376	Jan 31, 2000
PBIT-0101.01/US	LOOK AHEAD ROLLING SHUTTER SYSTEM IN CMOS SENSORS	Pending	United States of America	10958692	Oct 6, 2004
PBIT-0106.07/US	COLOR FILTER ARRAY AND MICRO LENS ARRAY	Pending	United States of America	10831176	Apr 1, 2004
PBIT-0110.00/PR	Improved Method for Flashed Reset	Abandoned	United States of America	60204372	May 16, 2000
PBIT-0110.01/US	IMAGE SENSORS WITH EXPOSE RESET	Pending	United States of America	10725114	Jun 23, 2003
PBIT-0111.00/JP	FRAME SHUTTER FOR CMOS APS	Pending	Japan	2001562006	Aug 23, 2002
PBIT-0111.00/PC	FRAME SHUTTER FOR CMOS APS	Pending	Japan	2001140176	Feb 23, 2001